

**CALIFORNIA DEPARTMENT OF WATER RESOURCES
OROVILLE FACILITIES
PRELIMINARY ISSUE SHEETS**

Revised by consulting team and reviewed at ~~July 26~~August 23 Work Group meeting

RECREATION

ISSUE STATEMENT R1. Adequacy of existing project recreation facilities, opportunities, and access to accommodate current use and future demand. (Issues addressed: 1, 2, 5-39, 41, 52, 53, 55-62, 64-85, 95, 96, 98, 104, 105, 110)

GEOGRAPHIC SCOPE:

Area within the Oroville Facilities FERC boundary, for existing recreation facilities. For unmet and future demand, geographic scope can include area within existing FERC boundary, as well as adjacent lands and off-site lands that have a clear nexus to the Oroville Project.

RESOURCE GOALS:

1. Compliance of the Oroville facilities with the existing FERC license.
2. Compliance of Oroville facilities with FERC regulations as they relate to recreation development.
3. Compliance of the Oroville facilities with existing regulations, including Americans with Disabilities Act (ADA) guidelines.
4. Provide recreation development to support a range of recreation opportunities (examples mentioned in comments: private business, primitive camping, boat in/shoreline camping, whitewater boating and all other types of boating, houseboat moorage, access to upper forks of Lake Oroville past log booms, model airplane flying, swimming and beach use, fishing, gold dredging, hang-gliding, kite flying, hiking, trail biking, equestrian trail riding, trail systems, and equestrian facility use).
5. Provide and maintain sufficient access for recreation visitors to utilize project recreation areas and facilities.
6. Provide recreation that supports and promotes development of public event venues at the Project (for events such as bass tournaments, water ski and powerboat and whitewater competitions).
7. Provide visitor orientation information and facilities in the Project area, including educational opportunities such as boating safety, environmental interpretation, and area history.
8. Minimize the impact of recreational activities and facilities on the natural environment and cultural resources.
9. Provide recreational development for diverse user groups, including existing and potential users, and locals and non-locals.
10. Develop where applicable, the appropriate level of access and facilities to match any sub-planning areas of the Project. (Clustering concept).
11. Provide the maximum level of recreation development and use that provides high quality recreation opportunities on the Project, while protecting the environment and being consistent with Project operations.
12. Provide improved swimming locations/facilities in the Project area.
13. Provide recreation development to meet both local and regional recreation demand, recognizing that the solutions may lie outside of the FERC boundary.

14. The project recreation facilities and their operation and maintenance will provide a quality recreational experience and accommodate current and future recreation demands, opportunities, and access.
15. Ensure project recreation facilities meet public demand through the license period.
16. Protect existing recreational uses from potential adverse effects of future developments.
17. Provide recreational development to match present demand and allow for future expansion to meet future demand for diverse use groups, including existing and potential users, and locals and non-locals.
18. Develop where applicable, the appropriate level of access and facilities to match the diverse resources of the greater Oroville complex (different reservoirs, the river and wildlife area) and any sub-planning areas of the project.
19. Restore the low flow channel to pre-dam flows.
20. Provide recreation opportunities complimentary to the diversity of the Oroville community and surrounding sphere of influence.
21. Sharing the beauty of this area with the outside world.
22. Maximize heritage tourism opportunities based on the local Native American culture.
23. Maximize heritage tourism opportunities based on multi-cultural history of the Oroville area.
24. Meet existing and future demand for outdoor Project-related public recreation opportunities, consistent with other Project purposes.
25. Work collaboratively with local, State, and federal recreation management agencies to ensure that the Oroville Project recreation facilities complement other local recreation developments and use patterns.

EXISTING INFORMATION:

1. DWR Recreation Plan for Lake Oroville State Recreation Area.
2. DPR Resource Management Plan and General Development Plan, Lake Oroville State Recreation Area.
3. City of Oroville General Plan and Land Use Maps.
4. Butte County General Plan.
5. Oroville Wildlife Area Management Plan.
6. Statewide Comprehensive Outdoor Recreation Plan.
7. FERC Form 80.
8. DPR Public Opinion on Outdoor Recreation in California.
9. Reservoirs of Opportunity: Report of the National Recreation Lakes Commission.
10. A Study of Boater Recreation On Lake Berryessa, California.
11. Poe Hydroelectric Project Recreation Studies.
12. Lake Oroville State Recreation Area Recreational Use Study.
13. DPR Lake Oroville Resource Inventory.
14. Lake Oroville State Recreation Area, Statewide Resources Management Plan.
15. Recreation Facilities Plan for North and South Delta.
16. Lake Oroville Attendance Figures.
17. Lake Oroville State Recreation Area Trail Map.
18. Assessment of bicycle trail link 1998.
19. Plumas National Forest EIS, 1988 (socioeconomic information).
20. Socioeconomic impacts of Red Man (Operation Bass) tournaments.
21. Personal income and per capita income by county, 1996-1998.
22. California Department of Finance: population estimates, projections, housing, labor force, etc.
23. Travel impacts by county, 1992-1998.

24. LOSRA Attendance data summaries (1995-2000)
25. Taxable sales by county and city, 1999.
26. Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation.
27. 1996 National and State Economic Impacts of Wildlife Watching.
28. Social, Economic, Environmental, and Leisure Assessment Database (SEELA).
29. The Demand for and Net Economic Value of Waterfowl Hunting in California's Sacramento and San Joaquin Valley Refuges.
30. Resident Annual Hunting and Fishing License Sales by County, 1987-1997.
31. Total Sales, Items, and Units Reported by License Year. 1990-1999.
32. Economic Contribution of Deer, Pronghorn antelope, and Sage Grouse Hunting to Northeastern California and Implications to the Overall "Value" of Wildlife.
33. Visitor Reactions to the U.S. Fish and Wildlife Service Fee Demonstration Program.
34. A Travel Cost Analysis of Waterfowl Hunting in the Central Valley of California.
35. HFQLGFRA EIS (1999) (Quincy Library stuff)
36. California Horsemen's Assoc. trail-riding logs. T.R.A.P.
37. Aquatic Center attendance logs (see Wade Hough)
38. DPR statistical reports (annual since LOSRA)
39. IIP
40. History of Butte County, California, In Two Volumes (Reproduced in one hardback volume.) Authors: Harry L. Wells and W. L. Chambers, 1882 Self-published by Harry L. Wells. Francis, Valentine and Company Engravers and Printers, San Francisco. Type of Information: Socioeconomic history of Butte County from its beginning when California became a state.
41. History of Butte County, Vol. I and Vol. II. Author: Joseph F. McGie, 1982, for the Butte County Board of Education. Type of Information: History of development of the County, socioeconomic growth beginning with gold discovery and on through 1982.
42. Eric See info – insert from fisheries Issue Statements)
43. LORA Recreation Plan
44. DPR and DWR historical recreation plans (include Bulletin 117-6)
45. FERC orders and correspondence related to Oroville Facilities
46. National Whitewater Use demand studies (American Whitewater)
47. USGS hydrologic data by water year
48. Recreation facilities development data at other DWR facilities
49. US Sailing statistical data

INFORMATION NEEDED:

1. Develop a complete inventory of recreation resources, including historic, cultural and natural, at the Oroville facilities.
2. Review the current condition and adequacy of recreation facilities in the Project area, identifying maintenance issues as well as opportunities and constraints for new facility development, existing and new locations.
3. Analyze existing recreation use patterns at the Project, compare against other water based recreation facilities within California and determine key barriers to existing and future growth in recreation use of Oroville facilities.
4. Identify operational and access constraints to the Oroville Facilities, particularly lake level data.
5. Identify suitable locations for swimming based on environmental and constructed factors, as well as areas of constraint.
6. Identify existing swimming areas.
7. Identify areas where facilities complementary to swimming are located.

8. Identify shoreline/land ownership.
9. Identify demand, needs and preferences of users for swimming opportunities.
10. Evaluate recreational and land use plans for consistency.
11. Evaluate ADA accessibility.
12. Identify current and projected swimming use.
13. Identify existing trails.
14. Identify current and projected trail-related use.
15. Identify any potential conflicts among diverse trail users.
16. Evaluate recreational and land use plans for consistency.
17. Identify current and projected recreation use.
18. Evaluate existing and potential public use impacts from recreation activities and facilities.
19. Regional Marketing plan.
20. Butte County marketing plan.
21. DWR Recreational marketing plan.
22. Input from residents.
23. Input from businesses.
24. Input from Butte County.
25. Input from City of Oroville.
26. Input from Paradise
27. Input from City of Chico
28. Identify existing recreational facilities and conditions.
29. Identify areas where facilities are complementary to each other.
30. Identify demand, needs and preferences for users of various recreation opportunities.
31. Identify all areas where debris has accumulated and prioritize clean-up efforts.
32. Identify preferences of maintenance agencies for schedule and plan.
33. Identify operational and access constraints to the Oroville Facilities, particularly visitor data and CalTrans data.
34. Identify suitable locations for improvements, as well as areas of constraint.
35. Identify existing access conditions.
36. Identify areas where access routes are complementary to each other.
37. Identify property ownership and responsibility.
38. Identify demand, needs and preferences of users accessing the LOSRA.
39. Evaluate recreational and land use plans for consistency.
40. Identify current and projected visitation.
41. Evaluate existing and potential public use impacts from increasing access.
42. Identify level of assessment for biological inventory (DPR, DFG).
43. Identify waterfowl data.
44. Identify alternative flora for invasive replants.
45. Determine feasibility of camouflaging utility infrastructure.
46. Determine present and future outdoor recreation and tourism demands and unmet needs in northern California and Oroville's probable share.
47. Perform specific studies for different aspects of the Oroville facilities, including transportation barriers/needs, trails, special event opportunities, warm water swimming and visitor information center location.

LEVEL OF ANALYSIS:

Literature review, field and desktop studies of project operations and developments to ascertain if current demand is met and if future demand will be met (Recreation Needs Assessment):

ISSUE STATEMENT R2. Adequacy of public safety at the Oroville Project recreation facilities. (Issues addressed: 49, 92, 93)

GEOGRAPHIC SCOPE:

Oroville Project recreation facilities.

RESOURCE GOALS:

1. Ensure public safety at all times. Ensure that safety facilities, staffing, and procedures are periodically reviewed to reflect changing uses of Project reservoirs and lands.
2. Provide appropriate and accurate information about the Project for safety and maintenance needs. (Maintenance as well as information)
3. Ensure compliance of existing safety regulations in both ADA and FERC guidelines for the Oroville facilities.
4. Ensure project lands, facilities and operational measures to provide for public safety and security.
5. Ensure public safety measures that might include patrols and adequate staffing.
6. Ensure that recreation facilities, their operation, and their maintenance provide a quality recreational experience and accommodate current and future recreation demands, opportunities, and access.
7. Appropriate pre-plans are distributed to local responding agencies.
8. Provide public safety in remote locations within the Project boundary.
9. Safety of the public and their properties will continue to be among the highest priorities when evaluating and managing new and existing recreation facilities and opportunities.
10. Work collaboratively with local, State, and federal recreation management agencies to ensure that the Oroville Project recreation facilities are constructed and maintained to appropriate public safety standards.

EXISTING INFORMATION:

1. DWR Recreation Plan for Lake Oroville State Recreation Area.
2. DPR Resource Management Plan and General Development Plan, Lake Oroville State Recreation Area.
3. City of Oroville General Plan and Land Use Maps.
4. Butte County General Plan.
5. Oroville Wildlife Area Management Plan.
6. Statewide Comprehensive Outdoor Recreation Plan.
7. FERC Form 80.
8. A Study of Boater Recreation On Lake Berryessa, California.
9. Lake Oroville State Recreation Area, Statewide Resources Management Plan.
10. Bureau of Reclamation DataWeb. Mid-Pacific Region-Dams.
11. DBW Lakes and Reservoirs Information site.
12. DBW Hunting and Fishing from Small Boats information site.
13. DBW PWC Use information site.
14. DBW Sacramento River information site.
15. DBW Water skiing safety information site.
16. FERC Guidelines for Public Safety at Hydropower Projects.

INFORMATION NEEDED:

1. Identify potential safety hazard areas and issues.
2. Identify suitable locations for improvement features.
3. Identify areas where safety has been a problem.
4. Identify any potential conflicts among uses and safety equipment.
5. Evaluate existing facilities and staffing to determine adequacies to meet present and future conditions and needs.

LEVEL OF ANALYSIS:

Literature review, fField and desktop studies of project operations to determine where problems have occurred, provide remedies for known problem areas, and develop methods to prevent foreseeable incidents (Public Safety and Resource Protection Study).

ISSUE STATEMENT R3. Effects of facilities operations on recreation and socioeconomic opportunities. (Issues addressed: 44, 50, 51, 54, 63, 109)

GEOGRAPHIC SCOPE:

Area within the Oroville Facilities FERC boundary and Butte County.

RESOURCE GOALS:

1. Ensure that Project operations do not have an unacceptable level of impact on recreation use of the Project area (including fluctuations in reservoir pool levels, water temperature, floating debris, etc.).
2. Ensure that sustainable and enjoyable levels of hunting and fishing are available on Project lands.
3. Minimize adverse effects of Project operations on fishing and hunting on Project lands.
4. Minimize adverse impacts on recreation due to reservoir drawdowns.
5. Provide community-wide socioeconomic support through managing project lands and facilities in a manner that promotes high quality recreational use of the project area.
6. Ensure that the operation and maintenance of Project recreation facilities will provide quality recreation experiences and accommodate current and future recreation demands, opportunities, and access.
7. Extend boat launch ramps or build new offset ramps to allow for continued boating operations at low pool levels.
8. Avoid potential negative impacts on trails by facilities development.
9. Provide the optimum opportunity for recreation use and enhancement of Project facilities, consistent with Project operation to accomplish Project purposes.
10. Make available water operations forecasts, to allow local, State, and federal recreation management agencies the opportunity to plan and operate efficiently.
11. Make water level forecasts available to the public. (include in information available)
12. Avoid adverse impacts on historical and cultural resources.
13. Preserve water supply, power generation and flood management capabilities and flexibility.

EXISTING INFORMATION:

1. DWR Recreation Plan for Lake Oroville State Recreation Area.
2. DPR Resource Management Plan and General Development Plan, Lake Oroville State Recreation Area.
3. City of Oroville General Plan and Land Use Maps.
4. Butte County General Plan.
5. Oroville Wildlife Area Management Plan.
6. Statewide Comprehensive Outdoor Recreation Plan.
7. FERC Form 80.
8. DPR Public Opinion on Outdoor Recreation in California.
9. Reservoirs of Opportunity: Report of the National Recreation Lakes Commission.
10. Lake Oroville State Recreation Area Recreational Use Study.
11. DPR Lake Oroville Resource Inventory.
12. Lake Oroville State Recreation Area, Statewide Resources Management Plan.
13. Lake Oroville Attendance Figures.
14. Recreation Developments at Licensed Hydropower Projects.
15. State Park Basics. Recreational information for various state parks within the SF Bay Area, Central Valley, Central Coast, Gold Country, and Shasta/Cascades.
16. 1997. Public Opinions and Attitudes on Outdoor Recreation in California.

17. 1999-2000 Guide to California's State-Operated Hunting Areas.
18. DWR Comparative Inventory of California's Largest Reservoirs.
19. DWR Initial Information Package.

INFORMATION NEEDED:

1. Identify operational and access constraints to the Oroville Facilities, particularly lake level data.
2. Identify suitable locations for swimming based on environmental and constructed factors, as well as areas of constraint.
3. Identify existing recreational facilities and conditions.
4. Identify areas where facilities are complementary to each other.
5. Identify demand, needs and preferences for users of various recreation opportunities.
6. Evaluate recreational and land use plans for consistency.
7. Evaluate ADA accessibility.
8. Identify current and projected recreation use.
9. Evaluate existing and potential public use impacts from recreation activities and facilities.
10. Study potential locations and methods to create warm water swimming facilities to serve users at use focal points on Oroville, the Forebay, Afterbay and the Lower Feather River.
11. Study means of creating alternative boating use attractions at the Forebay and Afterbay during low water operations at Oroville.

LEVEL OF ANALYSIS:

Literature review, field and desktop studies of facility operations and recreation developments to ascertain if they afford appropriate socioeconomic opportunities in the Lake Oroville Area. Coordinate with S1 and integrate with models developed by E&O.

ISSUE STATEMENT R4. Adequacy of operations and maintenance and clean-up activities associated with existing and new recreation areas. (Issues addressed: 87-91)

GEOGRAPHIC SCOPE:

Area within the Oroville Facilities FERC boundary.

RESOURCE GOALS:

1. Ensure that debris collection occurs on a regularly scheduled basis.
2. Ensure that the operation and maintenance of Project recreation facilities will provide quality recreation experiences and accommodate current and future recreation demands, opportunities, and access.
3. Collaborate with local, State, and federal recreation management agencies to ensure that cleanliness, integrity, and safety of existing and future Project recreation facilities can be efficiently maintained.
4. Dispose of slash piles from trail maintenance.
5. Provide adequate primitive-level trails.

6. Ensure that operations and maintenance of project recreation programs and facilities are in accordance with best industry practices.

EXISTING INFORMATION:

1. DWR Recreation Plan for Lake Oroville State Recreation Area.
2. DPR Resource Management Plan and General Development Plan, Lake Oroville State Recreation Area.
3. City of Oroville General Plan and Land Use Maps.
4. Butte County General Plan.
5. Oroville Wildlife Area Management Plan.
6. Statewide Comprehensive Outdoor Recreation Plan.
7. FERC Form 80.
8. Lake Oroville State Recreation Area Recreational Use Study.
9. DPR Lake Oroville Resource Inventory.
10. Lake Oroville State Recreation Area, Statewide Resources Management Plan.

INFORMATION NEEDED:

1. Identify existing facilities and conditions.
2. Identify all areas where debris has accumulated and prioritize clean-up efforts.
3. Identify property ownership.
4. Identify preferences of maintenance agencies for schedule and plan.
5. Obtain information regarding existing budgets, operations and maintenance plans, responsibilities and schedules for the various components of the greater Oroville complex, including the wildlife area, Afterbay outlet fishing access, Afterbay, Forebay, diversion pool, Oroville Reservoir, the river and trails systems.
6. Develop a new operations and maintenance plan, including the need for satellite maintenance facilities, opportunities for contracting various aspects to private or agency partners and other means to create efficiencies and reduce costs while providing adequate service.

LEVEL OF ANALYSIS:

Field studies of operations and maintenance and clean-up activities to determine where debris occurs, how to best remove it, and how to prevent accumulation with debris-management programs in the future.

ISSUE STATEMENT R5. Appropriate recreation funding, development, and management structure. (Issues addressed: 3, 4, 5-10, 12, 13-15, 28-39, 52,53, 55-62, 54-85, 96, 104, 105, 110-113, 115)

(Coordinate with Land Use Group for LM3 – Doug will work with Jim Martin)

GEOGRAPHIC SCOPE:

Area within the Oroville Facilities FERC boundary, as well as adjacent lands and off-site lands that have a clear nexus to the project-

RESOURCE GOALS:

1. Ensure that opportunities to coordinate across existing boundaries are met by encouraging agencies to integrate management and planning, especially with regard to post-licensing recreation measures.
2. Ensure that existing plans, policies, and regulations associated with the Project area are reviewed to identify opportunities for coordination and cooperation among affiliated management entities.
3. Management efforts will be in compliance with the federal Wild and Scenic Rivers Act, and the National Trails Act.
4. Provide reliable funding sources for recreation development, operation, and maintenance.
5. Encourage public-private partnerships in the development of companion recreation facilities.
6. Encourage all land management agencies with management responsibilities in the Project Boundary to coordinate planning and management efforts of project lands, where appropriate.
7. Ensure that the operation and maintenance of Project recreation facilities will provide quality recreation experiences and accommodate current and future recreation demands, opportunities, and access.
8. Ensure that managing agencies operate according to plans that appropriately consider public input.
9. Provide a management structure for the total Oroville complex and its various component parts that is public service oriented, seeks to optimize public use of the various project facilities, recognizes state laws and responsibilities while being responsive to local needs and input, is efficient and cost effective, encourages cooperation while providing for dispute resolution.
10. Amend Davis-Dolwig Act as appropriate.
11. Meet public needs for Project-related recreation maintenance, repair, rehabilitation, and management, consistent with: FERC requirements, the Davis-Dolwig Act, other applicable State and federal laws, and other Project purposes.
12. Collaborate with local, State, and federal recreation management agencies to ensure that the Oroville Project recreation facilities complement other local recreation developments and use patterns.
13. Collaborate with local, State, and federal recreation management agencies to efficiently provide a high standard of recreation opportunity at the Oroville Facilities.
14. Provide clear information to the public on agency responsibility for recreation operation and maintenance, including appropriate points of contact.
15. Ensure that operations and maintenance of project recreation programs and facilities are in accordance with best industry practices.

EXISTING INFORMATION:

1. DWR Recreation Plan for Lake Oroville State Recreation Area.
2. DPR Resource Management Plan and General Development Plan, Lake Oroville State Recreation Area.
3. City of Oroville General Plan and Land Use Maps.
4. Butte County General Plan.
5. Oroville Wildlife Area Management Plan.
6. Statewide Comprehensive Outdoor Recreation Plan.
7. FERC Form 80.
8. DPR Public Opinion on Outdoor Recreation in California.
9. Reservoirs of Opportunity: Report of the National Recreation Lakes Commission.
10. A Study of Boater Recreation On Lake Berryessa, California.
11. Poe Hydroelectric Project Recreation Studies.
12. Lake Oroville State Recreation Area Recreational Use Study.
13. DPR Lake Oroville Resource Inventory.
14. Lake Oroville State Recreation Area, Statewide Resources Management Plan.
15. Recreation Facilities Plan for North and South Delta.
16. Lake Oroville Attendance Figures.
17. Recreation Developments at Licensed Hydropower Projects.
18. 1980-1995 Participation in Fishing, Hunting, and Wildlife Watching: National and Regional Demographic Trends.
19. 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.
20. Sacramento National Wildlife Refuge Complex Visitor Use Survey. 1997 –1998.
21. 1996 National Survey of Fishing, Hunting and Wildlife-Associated Recreation.
22. 1991 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.
23. Hunter Questionnaire Summary. Sacramento National Wildlife Refuge.
24. 1985 National Survey of Fishing, Hunting, and Wildlife Associated Recreation.
25. Hunting on the Sacramento National Wildlife Refuge Complex.
26. Demographic Shifts: Potential Impacts for Outdoor Recreation Management.
27. National Outdoor Recreation Supply Information System (NORSIS).
28. Visitor Research Case Study: The Redding Resource Area Final Report.
29. Regional Demand and Supply Projection for Outdoor Recreation.
30. Effects of Subdivision and Access Restriction on Private Land Recreation Opportunities.
31. Sacramento District Lakes and Parks.
32. Natural Resources Management Survey (NRMS) Results From Fiscal Years 1998 and 1999.
33. Bureau of Reclamation DataWeb. Mid-Pacific Region- Dams.
34. South Delta Recreation Study for the South Delta Water management Study, California.
35. State Park Basics. Recreational information for various state parks within the
36. SF Bay Area, Central Valley, Central Coast, Gold Country, and Shasta/Cascades.
37. 1997. Public Opinions and Attitudes on Outdoor Recreation in California.
38. 1999-2000 Guide to California's State-Operated Hunting Areas.
39. Hunting and Other Public Uses on State and Federal Areas.
40. Resident Annual Hunting License Sales by County. 1987-1997.
41. Fish and Game Fact Sheet. Public Affairs/Conservation Education. 1999.
42. Disabled Persons Access Guide to California Fishing Areas and Piers.
43. DWR Comparative Inventory of California's Largest Reservoirs.
44. Bureau of Reclamation Data Web. Mid-Pacific Region-Dams.
45. DBW Lakes and Reservoirs Information site.
46. DBW Hunting and Fishing from Small Boats information site.

47. DBW PWC Use information site.
48. DBW Sacramento River information site.
49. DBW Water skiing safety information site.
50. FERC Guidelines for Public Safety at Hydropower Projects.
51. Plumas National Forest EIS, 1988 (socioeconomic information).
52. Socioeconomic impacts of Red Man (Operation Bass) tournaments
53. Personal income and per capita income by county, 1996-1998.
54. California Department of Finance: population estimates, projections, housing, labor force, etc.
55. Travel impacts by county, 1992-1998.
56. LOSRA, Recreation use study.
57. Taxable sales by county and city, 1999.
58. Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation.
59. 1996 National and State Economic Impacts of Wildlife Watching.
60. Social, Economic, Environmental, and Leisure Assessment Database (SEELA).
61. The Demand for and Net Economic Value of Waterfowl Hunting in California's Sacramento and San Joaquin Valley Refuges.
62. Resident Annual Hunting License Sales by County. 1987-1997.
63. Total Sales, Items, and Units Reported by License Year. 1990-1999.
64. Economic Contribution of Deer, Pronghorn antelope, and Sage Grouse Hunting to Northeastern California and Implications to the Overall "Value" of Wildlife.
65. Visitor Reactions to the U.S. Fish and Wildlife Service Fee Demonstration Program.
66. A Travel Cost Analysis of Waterfowl Hunting in the Central Valley of California.
68. Visitor Research Case Study: The Redding Resource Area Final Report.
69. LOSRA Initial Information Packet.

INFORMATION NEEDED:

1. Identify operational and access constraints to the Oroville Facilities, particularly lake level data.
2. Identify suitable locations for swimming based on environmental and constructed factors, as well as areas of constraint.
3. Identify existing recreational facilities and conditions.
4. Identify areas where facilities are complementary to each other.
5. Identify property ownership.
6. Identify demand, needs and preferences for users of various recreation opportunities.
7. Evaluate recreational and land use plans for consistency.
8. Evaluate ADA accessibility.
9. Identify current and projected recreation use.
10. Evaluate existing and potential public use impacts from recreation activities and facilities.
11. Identify potential safety hazard areas and issues.
12. Identify suitable locations for improvement features.
13. Identify areas where safety has been a problem.
14. Regional Marketing plan.
14. Butte County marketing plan.
15. DWR Recreational marketing plan.
16. Input from residents
17. Input from businesses.
18. Input from Butte County

19. Input from City of Oroville.
20. Identify all areas where debris has accumulated and prioritize clean-up efforts.
21. Identify preferences of maintenance agencies for schedule and plan.
22. Identify operational and access constraints to the Oroville Facilities, particularly
23. Visitor data and CalTrans data.
24. Identify suitable locations for improvements, as well as areas of constraint.
25. Identify existing access conditions.
26. Identify areas where access routes are complementary to each other.
27. Identify property ownership and responsibility.
28. Identify demand, needs and preferences of users accessing the LOSRA.
29. Evaluate recreational and land use plans for consistency.
30. Identify current and projected visitation.
31. Evaluate existing and potential public use impacts from increasing access.
32. Identify level of assessment for biological inventory (DPR, DFG).
33. Identify waterfowl data.
34. Identify alternative flora for invasive replants.
35. Determine feasibility of camouflaging utility infrastructure.
36. Study alternative management mechanisms and combinations and provide recommendations to accomplish resource goals.
37. Evaluate and identify potential opportunities for revenue generation, public-private partnerships and other reliable funding sources for recreation development, operation and maintenance.
38. Evaluate the opportunities and potential locations for a new multi agency visitor center and possible management structures to accomplish such a facility.

LEVEL OF ANALYSIS:

Desktop study of current funding, funding sources, potential new funding sources, level of funding needed for current and future recreation facilities. Assess recreation development and facility and program management structure to understand its effectiveness in if-it meetings current and future needs.

ISSUE STATEMENT R6. Appropriate management of fisheries and wildlife resources to provide recreational opportunities. (Issues addressed: 42, 43, 45-48, 63, 84, 107-109, 114) (coordinate with Environmental Work Group fisheries and terrestrial issues)

GEOGRAPHIC SCOPE:

Area within the Oroville Facilities FERC boundary, as well as adjacent habitats and off-site habitats that have a clear nexus to the project
~~Area within the Oroville Facilities FERC boundary.~~

RESOURCE GOALS:

1. Ensure that management efforts are conducted and monitored for long-term maintenance and enhancement of fisheries and riparian habitat communities.
2. Ensure that management of fish and wildlife resources within the Project Boundary provides for related recreation opportunities.
3. Ensure that the operation and maintenance of Project recreation facilities will provide quality recreation experiences and accommodate current and future recreation demands, opportunities, and access.
4. Collaborate with local, State, and federal fish and wildlife management agencies, to ensure protection and appropriate consumptive and non-consumptive recreational use of fish and wildlife resources associated with the Oroville Facilities and their operation, consistent with other project purposes.
5. Collaborate with the Department of Fish and Game (pursuant to the Davis-Dolwig Act and other pertinent agreements) to enhance fish- and wildlife-related recreation opportunities, consistent with: 1) obligations to protect special-status species, 2) operation of the Oroville Facilities for other Project purposes, and 3) DFG's management and stewardship mandates.
6. Ensure that existing recreation opportunities are preserved.

EXISTING INFORMATION:

1. DWR Recreation Plan for Lake Oroville State Recreation Area
2. DPR Resource Management Plan and General Development Plan, Lake Oroville State Recreation Area
3. City of Oroville General Plan and Land Use Maps
4. Butte County General Plan
5. Oroville Wildlife Area Management Plan
6. Statewide Comprehensive Outdoor Recreation Plan
7. FERC Form 80
8. DPR Public Opinion on Outdoor Recreation in California
9. Reservoirs of Opportunity: Report of the National Recreation Lakes Commission
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11. DPR Lake Oroville Resource Inventory
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15. State Park Basics. Recreational information for various state parks within the
16. SF Bay Area, Central Valley, Central Coast, Gold Country, and Shasta/Cascades.
17. 1997. Public Opinions and Attitudes on Outdoor Recreation in California.
18. 1999-2000 Guide to California's State-Operated Hunting Areas.

19. DWR Comparative Inventory of California's Largest Reservoirs.
20. DWR Initial Information Package.

INFORMATION NEEDED:

1. Identify operational and access constraints to the Oroville Facilities, particularly lake level data.
2. Identify suitable locations for swimming based on environmental and constructed factors, as well as areas of constraint.(?)
3. Identify existing recreational facilities and conditions.
4. Identify areas where facilities are complementary to each other.
5. Identify demand, needs and preferences for users of various recreation opportunities.
6. Evaluate recreational and land use plans for consistency.
7. Evaluate ADA accessibility and applicability.
8. Identify current and projected recreation use.
9. Evaluate existing and potential public use impacts from recreation activities and facilities.
10. Assess the range of hunting and fishing, wildlife viewing and nature study opportunities that are currently provided in the project area, identify opportunities that are not provided, and identify facilities and management structures needed to accomplish these opportunities.
11. Identification of consumptive and non-consumptive fish and wildlife resources and how the management of these resources are affected by other management activities (project operations, protected species management, recreation management, etc.)
12. Include evaluation of recreation opportunities outside the project boundary that are enhanced by project operations (for example, hatchery and broodponds).

LEVEL OF ANALYSIS:

Desktop and field studies to assess the range of appropriate hunting, and fishing and non-consumptive opportunities currently provided in the Project area and identify appropriate opportunities not provided. Include evaluation of recreation opportunities outside the project boundary that are enhanced by project operations (for example, hatchery and broodponds).

SOCIOECONOMICS

ISSUE STATEMENT S1: Improve economic development through recreation-
opportunities at the Oroville Facilities

RESOURCE GOALS:

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1. Provide community-wide support through managing project lands and facilities in a manner that promotes high quality recreational use of the project area.
2. Encourage recreation improvements, programs and public-private partnerships that have a high economic return to the local economy.
3. Collaborate with the Department of Parks and Recreation (pursuant to the Davis-Dolwig Act and other pertinent agreements), Department of Boating and Waterways, Wildlife Conservation Board, and other recreation management agencies, to enhance recreation opportunities provided by the Oroville Facilities and their operation, consistent with the operation of the Oroville Facilities for other Project purposes.
4. Collaborate with the Department of Fish and Game (pursuant to the Davis-Dolwig Act and other pertinent agreements) and other fish and wildlife management agencies, to enhance fish- and wildlife-related recreation opportunities, consistent with obligations to protect special-status species and the operation of the Oroville Facilities for other Project purposes.
5. Collaborate with ~~local~~ stakeholders (including but not limited to local organized recreation groups, Chamber of Commerce, NGOs, regional recreation groups, etc.), to enhance recreation opportunities provided by the Oroville Facilities and their operation, consistent with the operation of the Oroville Facilities for other Project purposes.
6. Enhance local economy.

GEOGRAPHIC SCOPE:

~~Area within the Oroville Facilities FERC boundary~~

Butte County and communities within Butte County

EXISTING INFORMATION:

1. Recreation use statistics collected by DWR, DPR, Lake Oroville SRA Recreational Use Study, and from records of local businesses
2. Spending profiles of visitors, as developed from the Lake Oroville SRA Recreational Use Study and from other available studies and local business records
3. Economic activity (personal income and employment) from County Business Patterns data compiled by the U.S. Department of Commerce
4. Travel patterns and spending compiled by the California Department of Tourism

5. Demographics and economic activity compiled by the U.S. Bureau of the Census and the California Department of Finance
6. Local economic development goals and plans
7. Purchasing and sales relationships from IMPLAN and other local/regional economic impact models
8. Historic and existing sales tax revenues, lodging tax revenues, property tax revenues, and business tax revenues.

INFORMATION NEEDED:

1. Surveys of visitors to Lake Oroville and affected reaches of the Feather River to supplement existing information on user activities and spending patterns
2. Surveys of local businesses to determine purchasing and sales relationships
3. Interviews with local government officials (cities, counties, townships, and special districts) to document procedures for collecting and distributing tax revenues affected by recreation activity at Lake Oroville.
4. Conduct economic analysis to understand outdoor recreation demands, unmet needs, opportunities and growth potential for recreation related use in the project area.
5. Evaluate the economic return to the local economy from alternative recreation uses and related costs to provide for such uses in order to assist in developing a recreation plan that optimizes returns while meeting the needs of the public.

LEVEL OF ANALYSIS:

The key socioeconomic relationships to be documented will allow for evaluating the socioeconomic impacts of recreation activity associated with existing and projected project operations. Studies would focus on understanding how historic, existing, and potential changes in recreation activity associated with use of the project facilities, Lake Oroville State Recreation Area and affected downstream reaches of the Feather River affect the local and regional economy, including businesses and local governments. Key socioeconomic relationships would be researched and documented, including how existing recreation facilities and improvements, access, and water and fishery conditions affect recreation use levels, and how recreation use levels, in turn, affect visitor spending, employment, personal income, and tax revenues in the local and regional economy. A thorough understanding of these relationships will facilitate evaluating the socioeconomic impacts of different operating and facility development scenarios, and for developing effective strategies to enhance economic development in the region. The potential for private enterprise and public-private partnerships to complement existing and proposed recreation enhancements also would be evaluated.

ISSUE STATEMENT S2: Assess the feasibility of economic development through lower local utility rates and other available economic options related to project resources development

RESOURCE GOALS:

1. Review managerial, legal, cost, and operational aspects of the Project to determine if the provision of lower utility rates on the local level is possible
2. Provide a reliable and economical water supply to all agencies served by the State Water Project.
3. Provide economic benefit to the State of California, County of Butte, and City of Oroville through optimum allocation of Project benefits, so as to contribute to the stability and growth of State, regional, and local economies.
4. Develop and maintain the goodwill and trust of local, regional, and State residents and agencies by being responsive to stakeholders' initiatives related to the Oroville Facilities, and carefully evaluate new proposals and opportunities for consistency with Project purposes and State and federal law.
5. Ensure favorable electric rates to foster economic development in Oroville area (Point of Origin of significant project generation).

GEOGRAPHIC SCOPE:

Area within the Oroville Facilities FERC boundary OR

Butte County

EXISTING INFORMATION:

1. Records of similar agreements between local interests and operators of state, federal, or private hydroelectric facilities
2. Historic and existing utility rates for users in the local region (Butte County)
3. Local and regional economic impact models (e.g., IMPLAN) capable of evaluating the effects of lower utility rates or other financial resources

INFORMATION NEEDED:

1. Interviews with state and other officials to identify potential institutional and legal constraints and to assess needed actions for implementation
2. Estimates of cost impacts to the Project of providing these resources locally

LEVEL OF ANALYSIS:

The feasibility studies would be designed at a level appropriate for developing project enhancement measures. Studies would focus on evaluating potential economic benefits from establishing lower utility rates or use of other financial resources for local M&I, agricultural, or other economic development purposes. The managerial, legal, cost, and operational aspects of the Project would be reviewed to determine if the provision of lower utility rates or the contribution of other Project resources on the local level is possible. The potential economic development benefit of providing these resources would be evaluated.